Manasa and Stones

Problem   Submissions   Leaderboard   Discussions   Editorial

Change language : English

Manasa is out on a hike with friends. She finds a trail of stones with numbers on them. She starts following the trail and notices that two consecutive stones have a difference of either *a* or *b*. Legend has it that there is a treasure trove at the end of the trail and if Manasa can guess the value of the last stone, the treasure would be hers. Given that the number on the first stone was 0, find all the possible values for the number on the last stone.

Note : The numbers on the stones are in increasing order

Input Format
The first line contains an integer *T* i.e. the number of Test cases. *T* testcases follow.
Each testcase has 3 lines. The first line contains *n* (the number of stones) The second line contains *a*. The third line contains *b*.

Output Format
Space separated list of numbers which are the possible values of the last stone in *increasing order*.

Constraints
$1 \leq T \leq 10$
$1 \leq n, a, b \leq 10^3$

Sample Input 00

```
2
3
1
2
4
10
100
```

Sample Output 00

```
2 3 4
30 120 210 300
```

Explanation

All possible series for first test cases are given below.

1. 0,1,**2**
2. 0,1,**3**
3. 0,2,**3**

4. 0,2,**4**

Hence the answer 2 3 4 .

Series with different number of final step for second test cases are

1. 0, 10, 20, **30**

2. 0, 10, 20, **120**

3. 0, 10, 110, **120**

4. 0, 10, 110, **210**

5. 0, 100, 110, **120**

6. 0, 100, 110, **210**

7. 0, 100, 200, **210**

8. 0, 100, 200, **300**

hence the answer 30 120 210 300

Suggest Edits

Current Buffer (saved locally, editable)

PHP

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Upload Code as File   Use a custom test case

Run Code   Submit Co